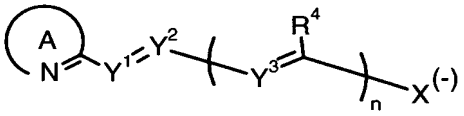
Metal complexes used as light-absorbent compounds in the information layer of optical data carriers

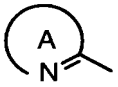
Abstract

Optical data carriers comprising a preferably transparent substrate which may, if desired, have previously been coated with one or more reflection layers and to whose surface a light-writable information layer, if desired one or more reflection layers and if desired a protective layer or a further substrate and a covering layer have been applied, which can be written on or read by means of blue light, preferably light having a wavelength in the range 360-460 nm, in particular from 390 to 420 nm, very particularly preferably from 400 to 410 nm, preferably laser light, where the information layer comprises a light-absorbent compound and, if desired, a binder, characterized in that at least one metal complex having at least one ligand of the formula (I)



(I),

where

the radical of the formula 

(hereinafter referred to as A for short)

is a substituted or unsubstituted and/or benzo- or naphtho-fused five- or six-membered aromatic or pseudoaromatic or partially hydrogenated heterocyclic radical,

n is 0 or 1,

Y^1 is N or C-R^1,

Y^2 is N or C-R^2,

Y^3 is N or C-R^3,

X is O, S or N-R^5,

R^5 is hydrogen, alkyl, alkenyl, aralkyl, cycloalkyl, acyl, aryl or a heterocyclic radical,

R^1 to R^4 are each, independently of one another, hydrogen, halogen, alkyl, alkoxy, monoalkylamino or dialkylamino, aralkyl, aryl, hetaryl, arylazo, hetarylazo, cyano or alkoxycarbonyl,

R^1;R^2, R^2;R^3 and R^4;R^5 can each, independently of one another, form a bridge and

R^2;R^5 can form a substituted or unsubstituted bridge when n is 0,

is used as light-absorbent compound.